

June 3, 2022

## Software Security Group - Earnings Quality Comparison (OKTA, NET, ZS, CRWD, PANW, FTNT)

### Summary

We have done full reviews of both Okta (OKTA) and Cloudflare (NET) with both receiving an earnings quality rating of 3- (Minor Concern). Because the other companies in this group have similar business models and accounting conventions, we decided to do an earnings quality comparison of the full group. We are adding comparative analysis for CrowdStrike (CRWD), ZScaler (ZS), Fortinet (FTNT), and Palo Alto (PANW).

With a couple of exceptions, these companies make the same adjustments to non-GAAP EPS. All are heavily reliant on stock compensation and capitalize sales commissions and software for internal use. We note that some of these players are more aggressive than others in these areas.

We urge clients to read the Cloudflare (NET) report from last week as a primer as we covered other comparative issues there as well.

- There are three basic items that these companies add back to non-GAAP EPS: capitalized software amortization, amortization of intangible assets, and amortization of capitalized sales commissions.
- All six of these companies amortize capitalized software over 3 years. PANW and FTNT lump capitalized software in with other assets. PANW amortizes that balance over 3-5 years while FTNT amortizes it over 1-7 years. We do not see any company standing out from the group as more or less aggressive than the other and we view these assumptions as conservative.
- Depreciable lives of network and computer equipment are a larger concern. NET and OKTA use 3 years, ZS uses 3-4 years, CRWD 3-5 years, while PANW uses 3-10 years

(but the depreciation figure indicates an effective period of closer to 3.5 years), and FTNT uses 1-7 years. We believe those are conservative assumptions too, and one could argue that the more conservative of the group are penalizing their results by a penny or two by using 3 years.

- Sales commissions are different. NET stands alone using a 3-year amortization period for initial amortization while commissions on renewal are amortized over the contract length. CRWD is alone at 4 years to amortize the initial sales commission and the rest use 5 years. We estimate that NET would be seeing an additional 0.7-0.9 cents per quarter on both GAAP and non-GAAP EPS if it was using a 5-year amortization period for initial contract acquisition costs.

## Our Quick Hits for Each Company

*\*Note that figures below do not reflect OKTA and CRWD's first-quarter numbers which were reported after this analysis was prepared.*

Below are our summary observations for each company ranked from most to least conservative followed by detailed comparisons with supporting data.

**Fortinet (FTNT)** is one of the “slower” growth names here which means it is seeing 30%+ growth

- It is not growing through acquisition, deals are small when they happen
- Balance sheet is very liquid and it is free cash flow positive
- It does not rely on stock compensation to fund the business and share count is fairly flat
- Very narrow spread between GAAP and non-GAAP EPS is a positive
- Only spending about half on R&D as a percentage of sales as others

**Palo Alto Networks (PANW)** still growing about 30% as well with highest sales of the group

- Only one recent deal involved paying with stock
- It is issuing new stock awards to employees of acquired companies, yet share count is still only rising about 7%
- Huge GAAP losses become large profits by adding back stock comp, but still free cash flow positive if it paid all cash wages
- Spends over 25% of sales on R&D, but the stock compensation part is declining

**CrowdStrike (CRWD)** faster growth after large acquisition, but balance sheet still liquid

- CRWD has some adjustments to non-GAAP and stock awards to acquired company employees that we can not find quantified
- Second-fastest amortization of capitalized sales commissions, which penalizes earnings which is more conservative
- Seeing total and cash R&D decline as a percentage of sales – that could be operating leverage with 60%+ sales growth
- Still relies on adding back stock compensation to post positive earnings, but share count growth is low – about 2%-3%

**ZScaler (ZS)** adding back cash payroll taxes related to stock compensation about one-quarter of recent earnings

- Not stretching amortization periods for intangibles and stock awards for acquired company employees appears modest
- Sales growth over 60% and share count growth is modest at 2%-3%
- Already paying more R&D in cash as percentage of sales – stock comp had been exceeding sales growth by a wide margin, but is narrowing now
- Free cash flow would become negative by a large amount if it had to pay wages in cash

**Okta (OKTA)** recent deal used over \$5 billion in stock and nearly \$1 billion more in stock to replace acquired employee stock awards

- Growing at over 60% and is spending the most in R&D as a percentage of sales
- OKTA is paying 1600bp of its R&D with stock – between this and deals, does OKTA have a currency still with the stock down almost 70% from recent highs?
- OKTA is barely free cash flow positive adding back stock compensation which could quickly turn negative if employees want more cash wages

**Cloudflare (NET)** free cash flow negative even after adding back stock compensation

- Acquisitions are using cash and stock and replacing stock awards for acquired companies' employees is costing more than the deals
- NET's growth rate is slower than the other small players and non-GAAP EPS would still be negative without adding back cash payments for payroll taxes

- NET's forecasts to achieve margins comparable to others relies heavily on paying more expenses in stock. Its stock is down the most of the group
- Probably the most conservative assumptions on amortization for sales commissions, depreciation of equipment, and amortization of intangibles

## These Companies Add Back the Same Expenses to Non-GAAP EPS

Here is a list of what these companies add back. In some cases, the companies specifically list impairments and significant non-recurring items and others do not. We believe all probably would add back items just as those who mention it already – especially impairments given those are likely to occur with intangible assets.

Expense Add-Backs to Non-GAAP EPS	FTNT	PANW	CRWD	ZS	OKTA	NET
Stock Compensation	Y	Y	Y	Y	Y	Y
Cash Payroll Taxes as part of Stock Comp.	N	N	N	Y	N	Y
Non-Cash Charity Payments	N	N	N	N	Y	N
Amortiz Acquired Intangibles	Y	Y	Y	Y	Y	Y
Acquisition/Integration Costs	Y	Y	Y	Y	Y	Y
Impairments/Significant non-Recurring	Y	*	*	Y	*	*
Litigation Costs/Settlements	Y	*	*	Y	*	*
Amortization of Debt Issue/Discount Costs	Y	Y	Y	Y	Y	Y
Loss on Extinguishment/Conversion of Debt	*	*	*	*	Y	*
Gain/Loss on Strategic Investments	Y	*	Y	*	*	*
Tax Impacts of all above	Y	Y	Y	Y	Y	Y

*\*not explicitly indicated*

We think it is important to note that only ZS and NET highlight adding back cash payroll taxes paid with stock compensation. That goes against the basic rationale here of making adjustments for largely recurring non-cash items. The only cash items being adjusted for by others are considered one-time items such as litigation and settlements.

- For ZS: adding back payroll taxes was 3.6 cents of non-GAAP EPS of 16.8 cents in its 3Q22 and 13.8 cents of non-GAAP EPS of 52.2 cents for fiscal 2021 (ended in July).
- For NET: adding back payroll taxes were 1.7 cents of non-GAAP EPS of 1.0 cents in the 1Q22 and 6.2 cents of the non-GAAP EPS of 4.8 cents for fiscal 2021 (ended in Dec.)

On other companies which are alone in doing something different:

- OKTA is the only company that adds back non-cash charitable contributions. This was worth 1.0 cents of the non-GAAP EPS of -18.4 cents for 4Q22 (ended in Jan) and 4.9-cents of the reported -46.2 cents of non-GAAP EPS for the fiscal year.
- PANW is the only one adding back FX impacts for all non-GAAP items. These have been largely immaterial. The 2-cent gain was subtracted from non-GAAP EPS of \$1.79 last quarter (ended April 2022). The 3-cent FX loss added back to non-GAAP EPS of \$6.15 for fiscal 2021 (ended in July).
- CRWD adds back the tax costs for the integration of its Humio acquisition. It is not quantified.

## Looking Deeper – Stock Compensation Is the Largest Adjustment

We talked about this in the Cloudflare (NET) report last week. Paying employees with stock is considered non-cash. However, to the employees, stock compensation is real income that they expect to appreciate further over time. One of the reasons we looked at this sector is we wonder with the stocks down, do employees still want to be paid as much in stock, or do they insist on higher cash wages and considerably more stock (risking dilution) if shares are still a big part of pay?

<b>Spread of GAAP to Non-GAAP</b>	<b>FTNT</b>	<b>PANW</b>	<b>CRWD</b>	<b>ZS</b>	<b>OKTA</b>	<b>NET</b>
Last Quarter GAAP	\$0.84	-\$0.74	-\$0.18	-\$0.72	-\$1.56	-\$0.13
Last Quarter Non-GAAP	\$0.94	\$1.79	\$0.30	\$0.17	-\$0.18	\$0.01
Last Quarter Stock Comp	\$0.27	\$2.53	\$0.39	\$0.76	\$1.02	\$0.13
Last fiscal year GAAP	\$3.63	-\$5.18	-\$1.03	-\$1.93	\$5.73	-\$0.83
Last fiscal year Non-GAAP	\$3.99	\$6.14	\$0.67	\$0.52	\$3.82	-\$0.05
Last fiscal year Stock Comp	\$0.99	\$9.50	\$1.30	\$1.92	-\$0.46	\$0.38

As we noted last week, only FTNT is reporting GAAP profits which expense stock compensation. Only NET is reporting negative free cash flow even after adding back stock compensation, but OKTA and ZS could become free cash flow negative if they needed to pay their employees in cash. CRWD and PANW would see a material hit to free cash flow in that situation. These tables were in last week's NET report and show trailing twelve-month figures since working capital changes can be more volatile quarter-to-quarter and impact free cash flow:

	Q1 22	Q4 21	Q3 21	Q2 21	Q1 21	Q4 20
<b>NET</b>						
T12 Free Cash Flow	-\$105.3	-\$43.1	-\$75.2	-\$53.3	-\$63.7	-\$92.1
T12 Stock Compensation	\$136.1	\$117.3	\$93.6	\$81.5	\$72.0	\$63.5
<b>OKTA</b>						
T12 Free Cash Flow	NA	\$87.5	\$114.9	\$123.1	\$133.8	\$110.7
T12 Stock Compensation	NA	\$565.5	\$464.0	\$361.9	\$222.6	\$196.2
<b>ZS</b>						
T12 Free Cash Flow	NA	\$155.4	\$144.4	\$103.2	\$66.9	\$40.7
T12 Stock Compensation	NA	\$351.3	\$314.3	\$278.6	\$248.6	\$212.5
<b>CRWD</b>						
T12 Free Cash Flow	NA	\$441.8	\$411.8	\$364.4	\$323.2	\$292.9
T12 Stock Compensation	NA	\$310.0	\$265.0	\$219.0	\$180.4	\$149.7
<b>PANW</b>						
T12 Free Cash Flow	\$1,605.8	\$1,505.5	\$1,436.0	\$1,387.0	\$1,390.5	\$1,223.2
T12 Stock Compensation	\$1,059.9	\$1,039.9	\$995.2	\$936.5	\$878.6	\$804.9
<b>FTNT</b>						
T12 Free Cash Flow	\$1,125	\$1,072	\$1,002	\$946	\$915	\$869
T12 Stock Compensation	\$216	\$212	\$207	\$202	\$199	\$194

We also think it is important to look at who is seeing stock compensation rise and who is seeing it fall as a percentage of revenue. The former should see the spread from GAAP to non-GAAP increase and are more dependent on employees wanting their shares. The latter should see EPS quality improve as the spread between GAAP and non-GAAP results narrows:

- FTNT and PANW are seeing stock compensation growth of low single digits and both are reporting revenue growth of about 30%.
- CRWD, OKTA, and ZS are all seeing revenue growth of 60%-70% in recent quarters – but their stock compensation is growing faster than that – often more than 100% even though ZS has seen the rate of growth fall in some periods to about revenue growth.
- NET is growing revenue at about 50% rates but its stock compensation growth is over 80% and accelerating.

The other problem is the companies most dependent on using stock as non-cash currency also have had the largest drop in their stock prices. Here are the recent peaks and current prices for the stocks. Many employees who received RSUs when prices were considerably higher or have much higher option strikes may be asking questions about being paid in stock going forward.

<b>Stock Declines</b>	<b>FTNT</b>	<b>PANW</b>	<b>CRWD</b>	<b>ZS</b>	<b>OKTA</b>	<b>NET</b>
Peak Price of last 12 months	\$367	\$629	\$293	\$369	\$264	\$218
Current Price	\$303	\$517	\$174	\$161	\$94	\$58
Decline %	-17%	-18%	-41%	-56%	-65%	-73%

## R&D May Be a Special Risk at Some Firms if Employees Want More Cash Wages

One thing that is worth noticing is all these companies spend heavily on R&D. We would consider that a positive too. However, since they add back stock compensation to non-GAAP earnings, look at how much R&D they are actually paying for in cash and how much could be at risk if employees don't want as much stock anymore. Here is their spending for the last six quarters:

<b>FTNT</b>	<b>-1Q</b>	<b>-2Q</b>	<b>-3Q</b>	<b>-4Q</b>	<b>-5Q</b>	<b>-6Q</b>
Sales	\$954.8	\$963.6	\$869.2	\$801.1	\$710.3	\$748.0
R&D	\$124.9	\$112.6	\$107.8	\$106.6	\$97.2	\$89.0
R&D %	13.1%	11.7%	12.4%	13.3%	13.7%	11.9%
Stock Comp	\$15.1	\$14.7	\$14.5	\$14.5	\$13.0	\$12.0
Cash R&D	\$109.8	\$97.9	\$93.3	\$92.1	\$84.2	\$77.0
Cash R&D %	11.5%	10.2%	10.7%	11.5%	11.9%	10.3%

- This is another area where FTNT looks to have little risk. It is already paying most of its R&D in cash. However, investors may argue the total spending is too low. It is spending less than many of its much smaller competitors in total dollars.

<b>PANW</b>	<b>-1Q</b>	<b>-2Q</b>	<b>-3Q</b>	<b>-4Q</b>	<b>-5Q</b>	<b>-6Q</b>
Sales	\$1,386.7	\$1,316.9	\$1,247.4	\$1,219.3	\$1,073.9	\$1,016.9
R&D	\$355.4	\$359.0	\$339.5	\$325.3	\$311.0	\$266.7
R&D %	25.6%	27.3%	27.2%	26.7%	29.0%	26.2%
Stock Comp	\$119.0	\$130.3	\$128.3	\$113.7	\$122.0	\$107.2
Cash R&D	\$236.4	\$228.7	\$211.2	\$211.6	\$189.0	\$159.5
Cash R&D %	17.0%	17.4%	16.9%	17.4%	17.6%	15.7%

- R&D is falling as a percentage of sales with higher sales growth. Much of that decline is due to lower stock compensation in this area already. Cash spending has been flat between 16.9%-17.4%.

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<b>CRWD</b>	<b>-1Q</b>	<b>-2Q</b>	<b>-3Q</b>	<b>-4Q</b>	<b>-5Q</b>	<b>-6Q</b>
Sales	\$431.0	\$380.1	\$337.7	\$302.8	\$264.9	\$232.5
R&D	\$105.0	\$97.6	\$90.5	\$78.2	\$66.1	\$57.5
R&D %	24.4%	25.7%	26.8%	25.8%	24.9%	24.8%
Stock Comp	\$31.1	\$27.3	\$25.8	\$17.8	\$14.6	\$11.8
Cash R&D	\$73.9	\$70.3	\$64.7	\$60.4	\$51.5	\$45.8
Cash R&D %	17.2%	18.5%	19.1%	19.9%	19.4%	19.7%

- CRWD is seeing both cash and total R&D decline as a percentage of sales, but stock compensation has only been about 700bp of total spending.

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<b>ZS</b>	<b>-1Q</b>	<b>-2Q</b>	<b>-3Q</b>	<b>-4Q</b>	<b>-5Q</b>	<b>-6Q</b>
Sales	\$286.8	\$255.6	\$230.5	\$197.1	\$176.4	\$157.0
R&D	\$76.6	\$69.2	\$65.2	\$56.2	\$41.0	\$41.8
R&D %	26.7%	27.1%	28.3%	28.5%	23.2%	26.6%
Stock Comp	\$31.4	\$30.0	\$28.6	\$25.6	\$15.0	\$17.8
Cash R&D	\$45.2	\$39.2	\$36.7	\$30.6	\$25.9	\$24.0
Cash R&D %	15.8%	15.3%	15.9%	15.5%	14.7%	15.3%

- Like PANW, ZS is seeing R&D stock compensation falling as a percentage of sales. Cash spending as a percentage of sales is rising already.

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<b>OKTA</b>	<b>-1Q</b>	<b>-2Q</b>	<b>-3Q</b>	<b>-4Q</b>	<b>-5Q</b>	<b>-6Q</b>
Sales	\$383.0	\$350.7	\$315.5	\$251.0	\$234.7	\$217.4
R&D	\$147.5	\$130.5	\$122.4	\$68.9	\$62.3	\$58.2
R&D %	38.5%	37.2%	38.8%	27.4%	26.5%	26.8%
Stock Comp	\$62.7	\$56.6	\$53.3	\$20.1	\$18.8	\$17.6
Cash R&D	\$84.7	\$74.0	\$69.1	\$48.8	\$43.5	\$40.6
Cash R&D %	22.1%	21.1%	21.9%	19.4%	18.5%	18.7%

- OKTA is increasing both total R&D and cash R&D as a percentage of sales. The bigger risk here may be that 1600bp of R&D is coming from stock compensation.



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NET	-1Q	-2Q	-3Q	-4Q	-5Q	-6Q
Sales	\$212.2	\$193.6	\$172.3	\$152.4	\$138.1	\$125.9
R&D	\$67.1	\$61.8	\$46.8	\$41.4	\$39.5	\$34.8
R&D %	31.6%	31.9%	27.1%	27.1%	28.6%	27.6%
Stock Comp	\$24.1	\$24.8	\$14.0	\$11.3	\$11.1	\$9.1
Cash R&D	\$43.0	\$37.0	\$32.8	\$30.1	\$28.5	\$25.7
Cash R&D %	20.3%	19.1%	19.0%	19.7%	20.6%	20.4%

- NET looks like OKTA. It has picked up spending in both areas but is now about 1200bp of R&D coming from stock compensation.
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## Acquisitions Help Differentiate the Companies Too

Many of these companies make regular acquisitions. Why not? They can assign much of the price to goodwill – so there's no expense there. The rest goes to other intangible assets such as developed technology or customer relationships. Those do get amortized, but that cost gets added back to non-GAAP results. Integration expenses are added back too as well as any impairments to goodwill. As far as this industry is concerned, acquisitions can only add to revenue and income. By non-GAAP standards, acquisitions are free.

We have a problem with the idea that acquisitions have no cost at all. However, we do applaud that what is amortized is done rapidly in most cases. We think investors should be questioning the following points for some of these companies:

- Several are using stock to make their larger deals – is this still a currency many will accept? Dilution is a risk here
- The acquired companies' employees and founders are also getting new stock awards following the deals. That also creates dilution. It also exacerbates the trend talked about above where stock compensation growth is outpacing revenue growth for many of these firms.
- We're also noticing that the amortization periods for intangibles are starting to be stretched in some cases.

**FTNT has made several small acquisitions.** All were paid for in cash. It did not specify that any recent deals required stock awards to the employees of the acquired companies. They are amortizing customer relationships over 10 years, but developed technology over only 4 years.

**PANW has four recent deals. Only one used stock in the purchase.** We noticed that whenever intangibles become a larger part of the cost allocation, the amortization period lengthens too. Also, PANW is reporting that it is adding to stock compensation due to replacing stock awards for employees who are merging into PANW:

- Bridge Crew March 2021 for \$156.9 million in cash + \$42.5 million to replace stock awards
  - Goodwill is \$129.6 million, Intangibles \$21.6 million amortized over 6 years
- Expanse December 2020 for \$797 million - \$435 in cash and \$341 in stock. Also \$160 million to replace stock awards
  - Goodwill \$598 million and intangibles of \$160 million amortized over 6-10 years
- Crypsis September 2020 for \$228 million, \$226 million in cash + \$27.1 million to replace stock awards
  - Goodwill \$158 million, Intangibles \$54 million amortized over 3-7 years
- CloudGenix April 2020 for \$404 million in cash plus \$30 million to replace stock awards
  - Goodwill \$301 million, Intangibles \$110 million amortized over 5-10 years

**CRWD has made only two recent deals and both were 100% cash.** They replaced stock awards, but we did not see the values put on those awards. In the case of Secure Circle in November 2021, CRWD allocated \$43 million to Goodwill and \$18 million to intangibles amortizing over 6-years.

For Humio purchased for \$370 million in cash, CRWD put \$291 million in Goodwill and \$76 million into intangibles, amortizing over 8 years.

**ZS made three recent cash acquisitions with the entire purchase price allocated to Goodwill or Intangibles that will be added back to non-GAAP earnings:**

- Smokescreen June 2021 for \$11.7 million in cash (no stock for purchase)
  - \$5.7 million Goodwill, \$5.6 million Dev. Tech, \$2.1 million Customer Relations
  - Amortization period 5 years

- Trustdome April 2021 for \$31.1 million in cash (no stock for purchase)
  - Allocated \$23.2 million Goodwill, \$7.2 million Developed Tech
  - Amortization period 5 years
- Edgewise May 2020 for \$30.7 million in cash (no stock for purchase)
  - \$16.7 million Goodwill, \$13.9 million Dev. Tech, \$1.3 million Customer Relations
  - Amortization period 5 years
- With the last two, employees at acquired firms received 120,000 of RSUs to cover their equity awards worth about \$23 million by our estimate.

**OKTA has one large acquisition and a small one in the last year – almost all goes to Goodwill**

- Auth0 was purchased for \$5.67 billion – \$257 million in cash and **shares worth \$5.175b**
  - They acquired and replaced employee stock awards and founder stock and expects the total purchase price to be about \$6.5 billion adding in these deals
  - Goodwill is \$5.29 billion, Dev. Tech. \$172 million, and \$141 million for Customer Relations.
  - Amortization is 5 years for Dev. Tech. and 2-6 years for Customer Relations
- atSpoke was purchased for \$79.3 million in cash – no stock
  - \$63.2 million in Goodwill, \$18.3 million Dev. Tech
  - Amortized over 3 years.

**NET we discussed in more detail in that report and we won't repeat it all here. NET is still allocating the bulk of deals to goodwill**, but is amortizing other intangibles over only 2 years. Our biggest concerns for NET's acquisitions are:

- It is using a combination of cash and stock
- It is spending more on replacement stock awards than the deals cost
- It is spending \$100 million more on replacement stock awards than NET spent on stock compensation from 2019-1Q22

## Explanation of EQ Rating Scale

6- (Exceptionally Strong)- Indicates uncommonly conservative accounting policies to the point that revenue and earnings are essentially understated relative to the company's peers. Higher possibility of reporting positive earnings surprises

5 (Strong)- Indicates the company has no areas of concern with its reported results and we see very little risk of the company disappointing due to recent results being overstated from aggressive reporting in recent periods.

4 (Acceptable)- Indicates the company may have exhibited a minor "red flag", but the severity of the issue is not yet a concern. Minimal risk of an earnings disappointment resulting from previous earnings or cash flow overstatement

3 (Minor Concern)- Indicates the company has exhibited either a larger number of or more serious warning signs than companies receiving a 4. The likelihood of an immediate earnings or cash flow disappointment is not considered to be high, but the signs mentioned deserve a higher degree of attention in the future.

2 (Weak) Indicates the company's recently reported results have benefitted materially from aggressive accounting. Follow up work should be performed to determine the nature and extent of the problem. There is a possibility that upcoming results could disappoint as the impact of unsustainable benefits disappears.

1 (Strong Concern)- Indicates that the company's recent results are significantly overstated and that we view a disappointment in upcoming quarters is highly likely

In addition to the numerical rating, the EQ Review Rating also include either a minus or plus sign. A minus sign indicates that our analysis shows the overall earnings quality of the company has worsened since the last review and there is a possibility the numerical rating will fall should the problem continue into upcoming quarters. Likewise, a positive sign indicates that the overall earnings quality is improving, and the company may see an upgrade in its numerical rating should the trend continue.

## Key Points to Understand About the EQ Score

The EQ Review Rating is much more than a blind, quantitative scoring method. While we utilize proprietary adjustments, ratios, and methods developed over decades of earnings quality analysis, the foundation of all of our analysis is reading recent SEC filings, press releases, conference call transcripts and in some cases, conversations with managements.

The EQ Review Rating is not comparable to a traditional buy/sell rating. The Rating is intended to specifically convey the extent to which reported earnings may be over/understated. Fundamental factors such as forecasts for future growth, increasing competition, and valuation are not reflected in the rating. Therefore, a high score does not in itself indicate a company is a buy but rather indicates that recent results are a good indication of the underlying earnings and cash generation capacity of the company. A low score (1-2) will likely result in us performing a more thorough review of fundamental factors to determine if the company warrants a full-blown sell recommendation.

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